Appl. No. 10/563,044 Amdt. Dated June 27, 2007

Reply to Office Action dated April 19, 2007

IN THE SPECIFICATION

Please amend the ABSTRACT to read, as follows:

"The invention is directed to an An aircraft spray booth providing for provides effective removal of particulate matter, overspray and volatile organic compound compounds from the spray booth area without premature and uneven clogging of the filtration system. The present invention is designed to create booth creates an accelerated airflow within the plenum of the spray booth to prevent or minimize stratification of the air and reduce particulate matter fallout. The airflow through the booth is increased by the reduction of the spray boot and filter area to approximately 1/3 of the original booth width. The decrease in the cross sectional area of the spray booth increased increases the overall speed of the airflow and decrease decreases the volume of air exchanged through the booth. The spray booth is tapered at the reduction area to cause air acceleration of the air at the sidewalls. The , which acceleration of air at the sidewalls causes a purging of air along the sidewalls and prevents paint and other particulate matter from adhering to the sidewalls. The reduction in the spray booth allows lighting can be placed closer to the painted surface in the tail and fuselage section of the aircraft to aid in the accuracy of the painting process."

On Page Nos. 4 - 5, Line No. 11 (Page No. 4) through Line No. 2 (Page No. 5), please amend the paragraph there appearing to read, as follows:

2

"The present invention is directed to a cross draft spray booth 10 for aircraft 12 that has advanced airflow characteristics to allow for the enhanced capture of contaminants associated with painting aircraft. Airflow through the aircraft spray booth 10 is enhanced by the dimensional layout of the booth 10. The transverse cross sectional area of the spray booth 10 is not a constant dimension, but varies, tapering near the rearward edge 14 of the wingtips 16 to the exhaust end 60 of the booth 10. In large conventional aviation spray booths, air within the booth typically stratifies from changes in air density due to variations in ambient air temperature and the addition of paint and solvents to the air stream. Heat generated by the spray work or stripping activities performed in the spray booth significantly changes the air density and causes stratification to occur. Stratification of the air within the spray booth is undesirable because concentrations of volatile organic compounds (Voss) or particulate matter (PM) can accumulate within the booth reaching the lower explosion limit (LEL), creating the risk of fire or a devastating and life threatening explosion. In the aircraft spray booth 10 of the present invention, the air passing through the spray booth 10 is accelerated to prevent or minimize stratification. To achieve the acceleration, the walls 18 of the booth taper from behind the wingtips 16 to the exhaust end 60. The tapering of the spray booth 10 causes the airflow to accelerate from the intake end 61 to the exhaust end 60 of the spray booth 10. The first booth width (as at 62) of the spray booth 10 is reduced by the tapered walls 18 to approximately ½ to ¾ of the first booth width of the opening of the spray booth 10, resulting in a second booth width (as at 63). The tapered walls 18 will cause the air velocity within the booth 10 to increase; preferably more than double from the intake end to exhaust end."

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On Page No. 5, at Line No. 3, please insert the following language:

"In other words, the entryway (as at 30) is adapted to permit the ingress and egress of an aircraft 12 and thus may be said to comprise an aircraft-receiving area, which area may be defined by the product of the entryway height (as at 65) and the first booth width 62. An airflow generation unit, such as an electric fan unit 50 is adapted to move air through the booth 10. An end wall opposes the entryway 30 and comprise an air outlet area as may be defined by a filter bank 42, which filter bank 42 may be dimensionally defined by the second booth width 63 and a bank height as at 66. The end wall may thus be said to comprise or include a filtration system adapted to remove airborne contaminates from the moving air. The booth 10 has tapered sidewalls formed to have a first section with a first booth width, in part, defining the aircraft-receiving area and a second section with a second booth width, which second booth width, in part, defines an air outlet area. The air outlet area may be defined by the product of the second booth width 63 and the height 66. It is contemplated that the first booth width is approximately 2/3rds greater than the second booth width, and that the tapered sidewalls essentially function to taper-channel moving air toward the air outlet area for accelerating a booth-contained airflow and enhancing aircraft painting and stripping."

On Page No. 8, at Line Nos. 20 - 24, please amend the paragraph there appearing to read, as follows:

"Various features of the invention have been particularly shown and described in connection with the illustrated embodiment of the invention, however, it must be

understood that these particular arrangements merely illustrate, and that the invention is to be given its fullest interpretation within the terms of the appended claims. For example, the foregoing specifications may be said to support an aircraft spray booth system for enhanced aircraft painting and stripping, which aircraft spray booth may be said to comprise, in combination an aircraft 12 and a tapered spray booth 10. The aircraft essentially comprises a fuselage 24 and wings 26 laterally-extended from the fuselage 24. The tapered spray booth 10 essentially functions to receive the aircraft 10 and booth direct an airflow. To these ends, the booth 10 essentially comprises a wing-receiving portion as at 70 and a fuselage-receiving portion as at 71. The wing-receiving portion 70 comprises a first transverse booth area and the fuselage-receiving portion comprises a second transverse booth area, which second transverse booth area is lesser in magnitude than the first transverse booth area for taper-channeling and accelerating a booth-directed airflow from the wing-receiving portion 70 to the fuselage-receiving portion 71. The taper-channeled and accelerated booth-directed airflow may well function to enhance aircraft painting and stripping.